

Halting Hyperbilirubinemia: Creating a Pathway to Success

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Halting Hyperbilirubinemia: Creating a Pathway to Success

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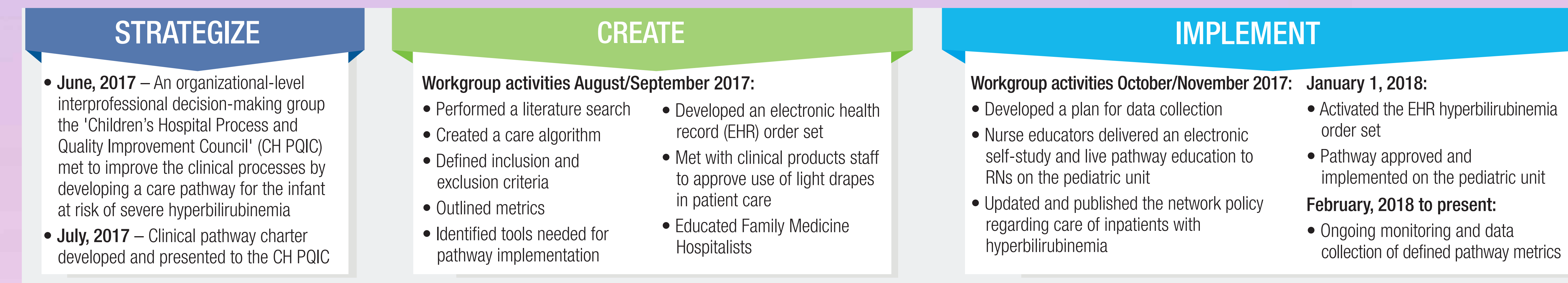
PURPOSE/LEARNING OBJECTIVES

Share pragmatic tactics designed to reduce the incidence of severe hyperbilirubinemia in the neonatal period.

BACKGROUND/EVIDENCE

- Hyperbilirubinemia is a common cause of hospital admission in neonates.
- Severe hyperbilirubinemia can lead to acute bilirubin encephalopathy and kernicterus – a form of irreversible neurological damage.
- American Association of Pediatrics (AAP) guidelines (2004) recommend:
 - Before discharge, every newborn should be assessed for the risk of developing severe hyperbilirubinemia.
 - Protocols for assessing this risk should be in place.
- Infants readmitted for hyperbilirubinemia should have a total serum bilirubin (TSB) level of ≤ 14 mg/dL in order to discontinue phototherapy and be considered for outpatient management (AAP, 2004).
- At an academic, 1,200 bed Magnet® facility inpatient pediatric unit, no standardized approach existed to assess and treat hyperbilirubinemia.
- Pre-intervention data (Oct.–Dec., 2017):
 - Mean length of stay (LOS) for infants undergoing triple phototherapy was 27 hours
 - Percentage of infants with a TSB level of ≤ 14 (a discharge criteria) pre-pathway was 53%.

METHODS/INTERVENTIONS

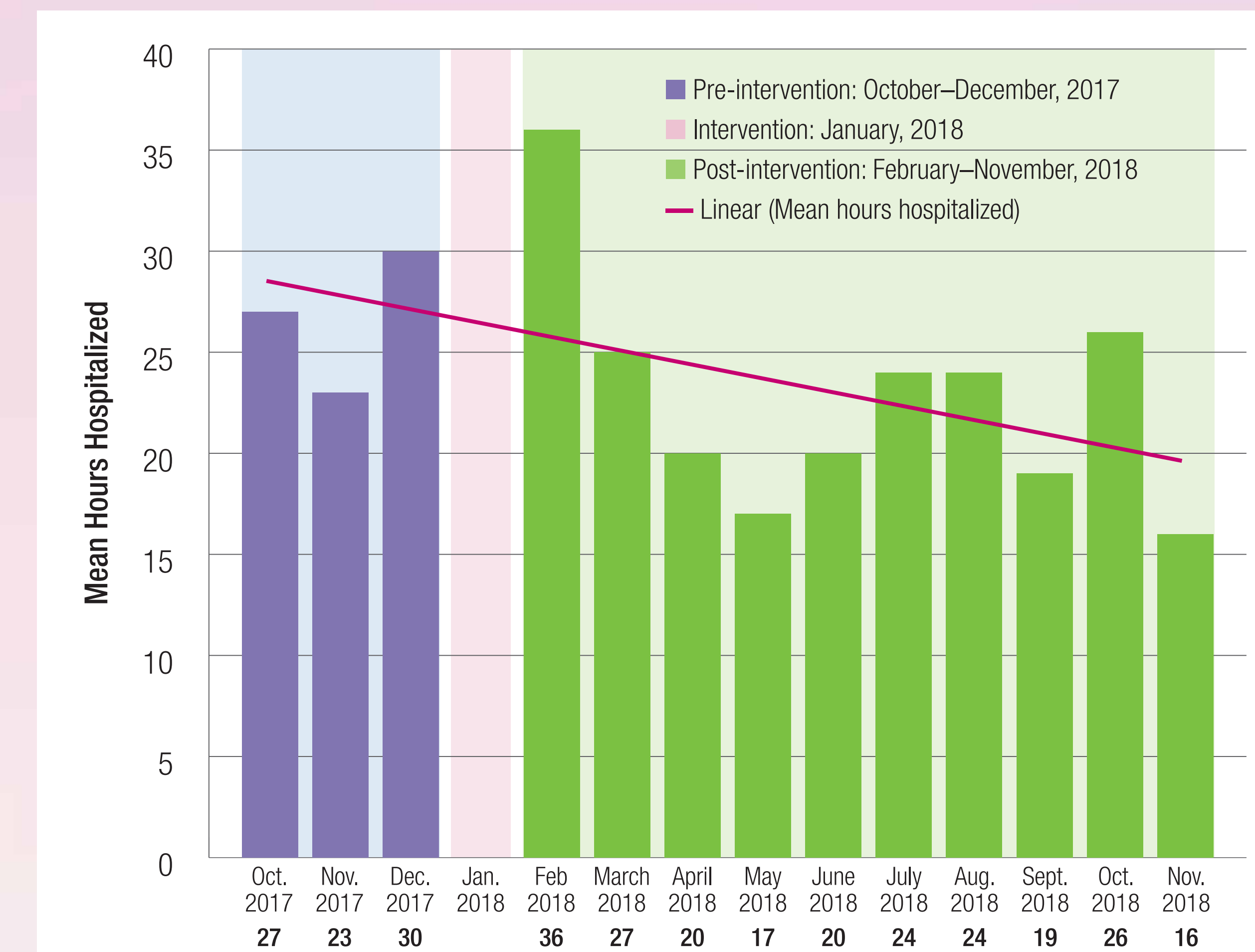


RESULTS

OUTCOME MEASURES:

- Decreased LOS in the neonate admitted with hyperbilirubinemia
- Increased percent of infants with TSB ≤ 14 on day discharge

LENGTH OF STAY INFANTS ADMITTED TO THE PEDIATRIC UNIT WITH HYPERBILIRUBINEMIA



TOTAL SERUM BILIRUBIN ≤ 14 ON DAY OF DISCHARGE INFANTS RECEIVING TRIPLE PHOTOTHERAPY



CHALLENGES/LESSONS LEARNED

- Bilirubin light drapes:
 - Required collaboration with our network products department to attain and stock equipment
- Pathway integration with Family Medicine and interdisciplinary teams outside of the division was challenging
 - Workgroup members met with Family Medicine representatives to brainstorm ways to improve pathway compliance



NEXT STEPS

- Introduce and implement the neonatal hyperbilirubinemia pathway on the Mother/Baby and Neonatal Intensive Care units.

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